Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Kentucky Power Company (dba American Electric Power)
Mailing Address: 1 Riverside Plaza, Columbus, Ohio 43215

is authorized to operate an electric power generating plant at Louisa, Kentucky

Source Name: **Big Sandy Plant**
Mailing Address: **P.O. Box 21325**
Louisa, Kentucky 41230
Source Location: **On U.S. 23, 6 miles North of Louisa**

Permit Type: **Federally-Enforceable**
Review Type: **Title V**
Permit Number: **V-97-009 (R-1)**
Log Number: 53484
Application Complete date: **December 10, 1996**
KYEIS #: **103-2140-0003**
AFS Plant ID #: **21-127-00003**
SIC Code: **4911**
ORIS Code: **1353**

Region: **Huntington-Ashland-Portsmouth-Ironton**
County: **Lawrence**

Issuance Date: **December 21, 1999**
Effective Date: **February 18, 2000**
Revision Date: **May 15, 2002**
Expiration Date: **December 21, 2004**

John S. Lyons, Director
Division for Air Quality

TABLE OF CONTENTS

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete on December 10, 1996, the Kentucky Division for Air Quality hereby authorizes the operation of the processing and air pollution control equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto and shall become the final permit unless the U.S. EPA files an objection pursuant to Regulation 401 KAR 50:035, Section 21(3).

The permittee shall not construct, reconstruct, or modify any emissions units without having first submitted a complete application to the permitting authority and received a permit for the planned activity, except as provided in this permit or in Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Division or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit: 01 (01) - BSU1 (Unit 1) Indirect Heat Exchanger

Description:
Construction commenced: by January, 1963
Pulverized coal-fired, dry bottom, wall-fired unit with an electrostatic precipitator
Number two fuel oil used for startup, stabilization, and backup fuel
Rated capacity: 2512 MMBTU/hour

Applicable Regulations:
Regulation 401 KAR 61:015, Existing indirect heat exchangers (State Effective Date: April 1, 1984), applicable to an emissions unit with a capacity of more than 250 MMBTU/hour and commenced before August 17, 1971 (This regulation is state-enforceable only until such time as the effective date of an EPA rulemaking approving this regulation into the federally-approved Kentucky State Implementation Plan.), and
Regulation 7, Prevention and Control of Emissions of Particulate Matter from Combustion of Fuel in Indirect Heat Exchangers

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, particulate emissions shall not exceed 0.24 lb/MMBTU as determined by the appropriate reference test method identified in the applicable regulation and incorporated into the Kentucky regulations in 401 KAT 50:015, as referenced in Section D of this permit.

b) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except that a maximum of sixty (60) percent opacity is allowed for a period or aggregate of periods of not more than six (6) minutes in any sixty (60) minutes during building a new fire, cleaning the firebox, or blowing soot.

c) Pursuant to Regulation 401 KAR 61:015, Section 5 (1), the sulfur dioxide emissions shall not exceed 6.0 lb/MMBTU based on a twenty-four-hour average.

3. Testing Requirements:

a) The permittee shall submit a schedule within six months from the issuance date of this permit to conduct at least one performance test for particulate within one year following the issuance of this permit.

b) If no additional stack tests are performed pursuant to Condition 4. d), the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Continued

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

a) Pursuant to Regulation 401 KAR 61:005, Section 3 and Regulation 401 KAR 50:035, Section 7(1)(c), continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. The continuous emission monitoring systems shall comply with Regulation 401 KAR 61:005, Section 3, particularly, performance specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A.

b) In accordance with Regulation 401 KAR 61:015, Section 6 (1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the Division.

c) In accordance with Regulation 401 KAR 61:015, Section 6 (3), the rate of each fuel burned shall be measured daily and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

d) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G(a)(20) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance tests.

e) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or COM system and make any necessary repairs. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

f) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM) Excluding the startup and shut down periods, if any 24-hour average sulfur dioxide value

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f) Continued
exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.

g) Pursuant to Regulation 401 KAR 61:005, Section 3, a continuous monitoring system for opacity shall conform to requirements of this section which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrating compliance with the applicable Performance Specification 1 of 40 CFR 60 Appendix B.

h) Pursuant to Regulation 401 KAR 61:005, Section 3 (5), the Division may provide a temporary exemption from the monitoring and reporting requirements of Regulation 401 KAR 61:005, Section 3 for the continuous monitoring system during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

5. Specific Record Keeping Requirements:

a) Records shall be kept in accordance with Regulation 401 KAR 61:005, Section 3(16)(f) and Regulation 401 KAR 61:015, Section 6, with the exception that the records shall be maintained for a period of five (5) years. Percentage of the COM data (excluding startup, shutdown, and malfunction data) showing excursions above the opacity standard in each calendar quarter shall be computed and recorded.

b) Records, including those documenting the results of each compliance test, shall be maintained for five (5) years.

6. Specific Reporting Requirements:

a) Pursuant to Regulation 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division:

1. Owners or operators of facilities required to install continuous monitoring systems for opacity and sulfur dioxide shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emissions standard averaging period which is a twenty-four (24) hour averaging period for sulfur dioxide. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

2. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of six (6) minute averages of opacity greater than the opacity standard in the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average of opacity.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

a) Continued

3. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.

4. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

5. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

b) The permittee shall report the number of excursions (excluding startup, shutdown, and malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

7. Specific Control Equipment Operating Conditions:

a) The electrostatic precipitator shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with good engineering practice.

b) Records (e.g., routine scheduled service, replacement of parts, etc.) regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 02 (02) - BSU2 (Unit 2) Indirect Heat Exchanger

Description:
Construction commenced: by October, 1969
Pulverized coal-fired, dry bottom, wall-fired unit with electrostatic precipitator and low nitrogen oxides' burner(s)
Number two fuel oil used for startup, stabilization, and backup fuel
Rated capacity: 7914 MMBTU/hour

Applicable Regulations:
Regulation 401 KAR 61:015, Existing indirect heat exchangers (State Effective Date: April 1, 1984), applicable to an emissions unit with a capacity of more than 250 MMBTU/hour and commenced before August 17, 1971 (This regulation is state enforceable only until such time as the effective date of an EPA rulemaking approving this regulation into the federally-approved Kentucky State Implementation Plan.), and
Regulation 7, Prevention and Control of Emissions of Particulate Matter from Combustion of Fuel in Indirect Heat Exchangers

1. Operating Limitations:
None

2. Emission Limitations:
a) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, particulate emissions shall not exceed 0.24 lb/MMBTU as determined by the appropriate reference test method identified in the applicable regulation and incorporated into the Kentucky regulations in 401 KAT 50:015, as referenced in Section D of this permit.

b) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except that a maximum of sixty (60) percent opacity is allowed for a period or aggregate of periods of not more than six (6) minutes in any sixty (60) minutes during building a new fire, cleaning the firebox, or blowing soot.

c) Pursuant to Regulation 401 KAR 61:015, Section 5 (1), the sulfur dioxide emissions shall not exceed 6.0 lb/MMBTU based on a twenty-four-hour average.

3. Testing Requirements:
a) The permittee shall submit a schedule within six months from the issuance date of this permit to conduct at least one performance test for particulate within one year following the issuance of this permit.

b) If no additional stack tests are performed pursuant to Condition 4. d), the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Continued

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

a) Pursuant to Regulation 401 KAR 61:005, Section 3 and Regulation 401 KAR 50:035, Section 7(1)(c), continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. The continuous emission monitoring systems shall comply with Regulation 401 KAR 61:005, Section 3, particularly, performance specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A.

b) In accordance with Regulation 401 KAR 61:015, Section 6 (1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the Division.

c) In accordance with Regulation 401 KAR 61:015, Section 6 (3), the rate of each fuel burned shall be measured daily and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

d) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G(a)(20) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance tests.

e) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or COM system and make any necessary repairs. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

f) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM) Excluding the startup and shut down periods, if any 24-hour average sulfur dioxide value

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f) Continued
exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.

g) Pursuant to Regulation 401 KAR 61:005, Section 3, a continuous monitoring system for opacity shall conform to requirements of this section which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrating compliance with the applicable Performance Specification 1 of 40 CFR 60 Appendix B.

h) Pursuant to Regulation 401 KAR 61:005, Section 3 (5), the Division may provide a temporary exemption from the monitoring and reporting requirements of Regulation 401 KAR 61:005, Section 3 for the continuous monitoring system during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

5. Specific Record Keeping Requirements:

a) Records shall be kept in accordance with Regulation 401 KAR 61:005, Section 3(16)(f) and Regulation 401 KAR 61:015, Section 6, with the exception that the records shall be maintained for a period of five (5) years. Percentage of the COM data (excluding startup, shutdown, and malfunction data) showing excursions above the opacity standard in each calendar quarter shall be computed and recorded.

b) Records, including those documenting the results of each compliance test, shall be maintained for five (5) years.

6. Specific Reporting Requirements:

a) Pursuant to Regulation 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division:

1. Owners or operators of facilities required to install continuous monitoring systems for opacity and sulfur dioxide shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emissions standard averaging period which is a twenty-four (24) hour averaging period for sulfur dioxide. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

2. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of six (6) minute averages of opacity greater than the opacity standard in the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average of opacity.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

a) Continued

3. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.

4. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

5. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

b) The permittee shall report the number of excursions (excluding startup, shutdown, and malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

7. Specific Control Equipment Operating Conditions:

a) The electrostatic precipitator shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with good engineering practice.

b) Records (e.g., routine scheduled service, replacement of parts, etc.) regarding the maintenance of the control equipment shall be maintained.

c) See Section E. for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 04 (04) - AUX2 (Auxiliary Boiler 2) Indirect Heat Exchanger

Description:
Construction commenced: by December, 1969
Number two fuel oil-fired
Rated capacity: 642 MMBTU/hour

Applicable Regulations:

Regulation 401 KAR 61:015, Existing indirect heat exchangers (State Effective Date: April 1, 1984), applicable to an emissions unit with a capacity of more than 250 MMBTU/hour and commenced before August 17, 1971 (This regulation is state enforceable only until such time as the effective date of an EPA rulemaking approving this regulation into the federally-approved Kentucky State Implementation Plan.), and Regulation 7, Prevention and Control of Emissions of Particulate Matter from Combustion of Fuel in Indirect Heat Exchangers

1. **Operating Limitations:**
None

2. **Emission Limitations:**
a) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, particulate emissions shall not exceed 0.24 lb/MMBTU as determined by the appropriate reference test method identified in the applicable regulation and incorporated into the Kentucky regulations in 401 KAT 50:015, as referenced in Section D of this permit. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using fuel usage rates, fuel analysis, and appropriate emission factors information.

Formula (AP-42 factor) for particulate emissions: 0.002 lb/Gallon / Heating value in MMBTU/gallon.

b) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except that a maximum of sixty (60) percent opacity is allowed for a period or aggregate of periods of not more than six (6) minutes in any sixty (60) minutes during building a new fire, cleaning the firebox, or blowing soot.

c) Pursuant to Regulation 401 KAR 61:015, Section 5 (1), the sulfur dioxide emissions shall not exceed 4.0 lb/MMBTU based on a twenty-four-hour average. Compliance with the sulfur dioxide allowable standard may be demonstrated by calculating sulfur dioxide emissions using fuel usage rates, fuel analysis, and appropriate emission factors information.

Formula(AP-42 factor) for sulfur dioxide emissions: 0.142 x %S lb/Gallon / Heating value in MMBTU/gallon.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

When the unit is in normal operation, the permittee shall read, weather permitting, the opacity of emissions from the stack using EPA Reference Method 9 once per daylight shift.

4. Specific Monitoring Requirements:

a) Pursuant to Regulation 401 KAR 61:015, Section 6 (2), the sulfur content of liquid fuels, as burned, shall be determined based on certification from the fuel supplier. This certification shall include the name of the oil supplier and a statement that the oil complies with the specifications under the definition for distillate oil in Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc.

b) In accordance with Regulation 401 KAR 61:015, Section 6 (3), the rate of each fuel burned shall be measured quarterly on an as-burned basis and recorded. The heating value of fuel shall be ascertained at least quarterly and recorded.

5. Specific Record Keeping Requirements:

Pursuant to Regulation 401 KAR 61:015, Section 6, the owner or operator of the indirect heat exchanger shall maintain a file of all measurements and data required. The record of any such measurement(s) and summary shall be retained for at least five (5) years, pursuant to Regulation 401 KAR 50:035.

6. Specific Reporting Requirements:

a) Pursuant to Regulation 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division:

1. Owners or operators of facilities required to monitor by fuel supplier certification for sulfur dioxide emissions shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the averaging period specified in the emission standard which is a twenty-four (24) hour averaging period. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

2. For opacity measurements, excess emissions shall be reported quarterly, based on EPA Reference Method 9.

b) Pursuant to Regulation 401 KAR 61:005, Section 3 (16), the owner or operator shall submit a quarterly report of excess emissions. When no excess emissions have occurred such information shall be included in the report.

7. Specific Control Equipment Operating Conditions:

NA

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 05 (05) - Truck dump unloading and coal conveying, processing, transfer points, and handling

Description:
Construction commenced: 1991
Equipment includes: Unloading at Station 10, Conveyors and Handling (Conveyors 10E and 10W from Station 10 to Station 11)

Operating rate: 2000 tons/hour

Applicable Regulations: Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Y, Standards of performance for coal preparation plants.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60 Subpart Y, 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty (20) percent opacity or greater.

3. Testing Requirements:
Pursuant to Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60 Subpart Y, 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity at least annually.

4. Specific Monitoring Requirements:
The permittee shall perform a qualitative visual observation of the opacity of emissions from each operation specified in this section on a weekly basis but more often if necessary to ensure compliance. A log of observations shall be maintained. As soon as practicable following such observations, if visible emissions from any operation are believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9. If any operation is determined to be exceeding or approaching the applicable standard, the permittee shall initiate an inspection of the control equipment and make any necessary repairs as soon as practicable. A log of remedial measures taken shall also be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Record Keeping Requirements:

Records of the coal received and processed (coal tonnages) shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The air pollution control equipment (including but not limited to a hood and water spray system) shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with good engineering practice.

b) Records regarding the maintenance and operation of the control equipment (including but not limited to a hood and water spray system) shall be maintained.

c) See Section E. for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 06 (03) - Coal unloading, crushing, conveying and handling

Description:
Construction commenced: 1969
Equipment includes: Rotary Dumper (Station 11), car shake out facility (Station 1), crushers, conveyors and handling (Stations 1 through 3, Feeder F-1, Conveyors 1, 3, 4, 11,12, Feeders 11A and 11B, Feeders 13A and 13B, Station 13, Conveyors 13N, 13S, 14, 15, 15U, 16A through 16E, 16, 17, and Station 15), stockpiles

Operating rate: 2600 tons/hour

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions.

Applicable Requirements:

a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

1. application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

2. installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.

b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:
None

2. Emission Limitations:
None

3. Testing Requirements:
None

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of coal received and processed.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) Continued

5. Specific Record Keeping Requirements:

Records of the coal received and processed (coal tonnages) shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The control equipment (including but not limited to hoods, enclosures, use of dust suppressant/foam, telescopic chute, and water spray system) shall be operated as necessary to maintain compliance with applicable requirements in accordance with good engineering practice.

b) Records regarding the maintenance and operation of the control equipment (including but not limited to hoods, enclosures, use of dust suppressant/foam, telescopic chute, and water spray system) shall be maintained.

c) See Section E. for further requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant, the permittee shall comply with the applicable regulations. Process and emission control equipment at each insignificant activity subject to a generally applicable regulation shall be inspected weekly and a qualitative inspection and observation made. The results of the inspections and observations shall be recorded in a log, noting emission color, duration, and density (heavy, light, or none), other compliance information if applicable, and the cause and any corrective actions taken for any abnormal visible emissions.

Description	Generally Applicable Regulation
1. Number two fuel oil system including unloading and storage	NA
2. Paved and unpaved roadways and parking areas within facility gate	Regulation 401 KAR 63:010
3. Wet ash and ponded ash handling and management	NA
4. A gasoline fuel dispensing operation handling less than 5000 gallons per day, such as filling of tanks, locomotives, automobiles, and having a storage capacity less than or equal to 10,500 gallons	General Requirements of Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Kb
5. A diesel fuel dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month	NA
6. Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids	NA
7. Degreasing operations that do not exceed 145 gallons per year, cold cleaners which meet exemption criteria from Regulation 401 KAR 59:185, which do not use halogenated solvents	NA
8. The following equipment related to manufacturing activities not resulting in the emission of hazardous air pollutants: brazing equipment, cutting torches, soldering equipment, welding equipment	NA
9. Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent by volume	NA

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

10. Operations using aqueous solutions containing less than one percent of volatile organic compounds excluding hazardous air pollutants	NA
11. Repair of electrostatic precipitators, replacement of bags in baghouses, and filters in other air filtration equipment	NA
12. Heat exchanger cleaning and repair	NA
13. Process vessel degassing and cleaning to prepare for internal repairs	NA
14. Paved and unpaved roads and parking lots with public access	Regulation 401 KAR 63:010
15. Laboratory fume hoods and vents used exclusively for chemical or physical analyses	NA
16. Flue gas conditioning system and associated chemicals including sulfur storage tank	NA
17. Combustion source flame safety purging on startup	NA
18. Water-based adhesives that are less than or equal to five percent by volume volatile organic compounds excluding hazardous air pollutants	NA
19. Natural draft cooling towers not regulated by NESHAP and associated chemical storage tanks, for which emission potential is less than five (5) tons per year with potential emissions a hazardous air pollutant less than 1000 pounds per year	NA
20. Stockpiled soils from soil remediation activities that are waiting transport for disposal	Regulation 401 KAR 63:010
21. Infrequent evaporation of boiler cleaning liquids.	NA

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. Particulate, sulfur dioxide, and visible (opacity) emissions, as measured by methods referenced in Regulation 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS

1. Pursuant to Regulation 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any emissions unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a) Date, place as defined in this permit, and time of sampling or measurements;
   b) Analyses performance dates;
   c) Company or entity that performed analyses;
   d) Analytical techniques or methods used;
   e) Analyses results; and
   f) Operating conditions during time of sampling or measurement.

2. Records, of all required monitoring data and support information, including calibrations, maintenance records, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]

3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c), the permittee shall allow the Cabinet or authorized representatives to perform the following:
   a) Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
   b) Have access to and copy, at reasonable times, any records required by the permit:
      i) During normal office hours, and
      ii) During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
   c) Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
      i) During all hours of operation at the source,
      ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
      iii) During an emergency; and
   d) Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
      i) During all hours of operation at the source,
      ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
      iii) During an emergency.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Division's Ashland Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. The reports are due within thirty (30) days after the end of each six month reporting period which commences on the initial issuance date of this permit. The permittee may shift to semi-annual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semi-annual reports are due January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6 (1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

6. a) In accordance with the provisions of Regulation 401 KAR 50:055, Section 1, the owner or operator shall notify the Division for Air Quality's Ashland Regional Office concerning startups, shutdowns, or malfunctions as follows:

   i) When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.

   ii) When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.

   b) In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions to the Division for Air Quality's Ashland Regional Office. Prompt reporting shall be defined as quarterly for any deviation related to emission standards (other than emission exceedances covered by condition 6(a) above) and semi-annually for all other deviations from the permit requirements if not otherwise specified in the permit.

7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality and the U.S. EPA in accordance with the following requirements:

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

7. Continued.

   a) Identification of each term or condition of the permit that is the basis of the certification;
   b) The compliance status regarding each term or condition of the permit;
   c) Whether compliance was continuous or intermittent;
   d) The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1) (c), (d), and (e); and
   e) The certification shall be postmarked by the thirtieth (30th) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. Annual compliance certifications should be mailed to the following addresses:

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Division for Air Quality
Ashland Regional Office
P.O. Box 1507
Ashland, Kentucky 41105-1507

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, Kentucky 40601.

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission report is mailed to the permittee.

9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance tests required by the permit shall be submitted to the Division by the source or its representative within forty-five (45) days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be (a) violation(s) of State Regulation 401 KAR 50:035, Permits, Section 7(3)(d) and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
   b) If any additional applicable requirements of the Acid Rain Program become applicable to the source;
   c) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 KAR 50:035, Permits, Section 7(3)(j)]

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.

SECTION G - GENERAL CONDITIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]

7. Pursuant to Regulation 401 KAR 50:035, Section 7(3)(e), the permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance.

8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within ninety (90) days after the date of notice as specified in Regulation 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]

11. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7(3)(g)]

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of the U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035, Permits, Section 7(2)(b)5]

14. Nothing in this permit shall alter or affect the authority of the U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Permits, Section 8(3)(a)]

15. Permit shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emissions units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of the permit.

16. The permittee may conduct test burns of materials other than those listed in the permit without a construction permit or a reopening of this permit provided that:
a) Notification is provided to the Division at least (thirty) 30 days prior to initiation of the test burning of the material;
b) The source complies with all applicable regulations and emission limitations;

SECTION G - GENERAL CONDITIONS (CONTINUED)

16. Continued.

c) The permittee agrees to perform such additional testing as may be required by the Division.

17. The permanent burning of any material (addressed in above condition) shall be allowed upon completion of testing provided that:
a) The Division determines that a permit is not required. Such determination shall be made within sixty (60) days of the application receipt along with the test results;
b) The permittee keeps records of the date and time of burn;
c) The permittee keeps records of analysis and feed rate of material;
d) Burning any of those materials shall not be subject to any new applicable regulation and the source shall comply with all applicable regulation and emission limitations.

18. Fugitive emissions shall be controlled in accordance with Regulation 401 KAR 63:010.

19. Emission limitations listed in this permit shall apply at all times except during periods of startup, shutdown, or malfunctions and opacity limitations listed in this permit shall apply at all times except during periods of startup and shutdown in accordance with Regulation 401 KAR 50:055, provided the permittee complies with the requirements of Regulation 401 KAR 50:055.

20. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to Regulation 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

21. All previously issued construction and operating permits are hereby subsumed into this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 50:035, Permits, Section 12]

SECTION G - GENERAL CONDITIONS (CONTINUED)

c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

2. The permittee shall comply with all requirements and conditions of the Title IV Acid Rain Permit (A-98-002, Attachment C) and the Phase II permit application (including the Phase II NO_x compliance plan and averaging plan, if applicable) issued for this source. The permittee shall also comply with all requirements of any revised or future acid rain permit(s) issued for this source.

(e) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
   i) An emergency occurred and the permittee can identify the cause of the emergency;
   ii) The permitted facility was at the time being properly operated;
   iii) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
   iv) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of Regulation 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(e) Continued

2. Emergency conditions listed in General Condition (e)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

(f) Risk Management Provisions under the Clean Air Act 112(r)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:

   a. Submit a Risk Management Plan (RMP) and comply with the Risk Management Program. The permittee shall submit the RMP on diskette to:

      RMP Reporting Center
      P.O. Box 3346
      Merrifield, VA 22116-3346.

   b. Submit additional relevant information if requested by the Division or the U.S. EPA.

(g) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.

   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards of recycling and recovery equipments contained in 40 CFR 82.158.

   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.

   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

SECTION G - GENERAL CONDITIONS (CONTINUED)

1. Continued

   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None

Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

PHASE II ACID RAIN PERMIT

Kentucky Power Company
Big Sandy Plant
ORIS Code 1353

ACID RAIN PERMIT CONTENTS

1) Statement of Basis

2) SO_2 allowances allocated under this permit and NOx requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application dated Dec.11, 1995 and the Phase II NO_x Compliance Plan dated Dec.21, 2001.

5) Summary of Actions

- **Statement of Basis:**

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Natural Resources and Environmental Protection Cabinet, Division for Air Quality issues this permit pursuant to Regulations 401 KAR 50:035, Permits, 401 KAR 50:072, Acid Rain Permit, and Federal Regulation 40 CFR Part 76.

Plant Name: Big Sandy Plant
Affected Unit: BSU1

➢ **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2000	2001	2002	2003	2004
Tables 2, 3 or 4 of 40 CFR Part 73	6,428*	6,428*	6,428*	6,428*	6,428*

NO_x Requirements	
NO_x Limits	(i) Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves the NOx emissions averaging plan for this unit. This plan is effective for calendar year 2000 through 2004. Under this plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.58 lb/mmBtu. In addition, this unit shall not have an annual heat input greater than 16,719,000 mmBtu. (ii) Under this plan, the actual Btu-weighted annual average NOx emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7. If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A) and (B)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation and annual heat input limit set in condition (i). In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.

The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned condition does not necessitate a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

PERMIT (Conditions)

Plant Name: Big Sandy Plant
Affected Unit: BSU2

➢ **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2000	2001	2002	2003	2004
Tables 2, 3 or 4 of 40 CFR Part 73	19,711*	19,711*	19,711*	19,711*	19,711*

NO_x Requirements	
NO_x Limits	(i) Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves the NOx emissions averaging plan for this unit. This plan is effective for calendar year 2000 through 2004. Under this plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.58 lb/mmBtu. In addition, this unit shall not have an annual heat input greater than 44,857,000 mmBtu. (ii) Under this plan, the actual Btu-weighted annual average NOx emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7. If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A) and (B)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation and annual heat input limit set in condition (i). In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.

The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned condition does not necessitate a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

- **Comments, Notes, and Justifications:**

  Affected units are two (2) dry bottom wall fired boilers.

  Received NOx Averaging Plan and NOx Compliance Plan in Dec.21, 2001 and a revised NOx Averaging Plan with cover letter in Jan.16, 2002 that corrected the Glen Lyn 51 & 52 units Annual Heat Input limits.

- **Permit Application:** Attached
  The Phase II Permit Application dated Dec.11, 1995 and the Phase II NO_x Compliance Plan dated Dec. 21, 2001 and the Jan.16, 2002 cover letter with Phase II NOx Averaging Plan dated Jan.16, 2002 are all part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application dated Dec.11, 1995, the Phase II NO_x Compliance Plan dated Dec.21, 2001 and Phase II NOx Averaging Plan dated Jan.16, 2002.

- **Summary of Actions:**

  Previous Actions:

  1. Draft Phase II Permit (# AR-96-05) including SO_2 compliance was issued for public comments on September 19, 1996.

  2. Final Phase II Permit (# AR-96-05) including SO_2 compliance plan was issued on December 11, 1996.

  3. Draft Phase II Permit (# A-98-002) was issued with the 1998 revised SO_2 allowance allocations and NO_x emissions standard for public comments on November 23, 1998.

  4. Final Phase II Permit (# A-98-002) was issued with the 1998 revised SO_2 allowance allocations and NO_x emissions standard on January 1, 2000.

  5. Phase II Permit (# AR-96-05) is hereby null and void.

  Present Action:

  1. Draft Phase II Permit (# A-98-002) has been included along with the 1998 revised SO_2 allowance allocations and NO_x emissions averaging application into the Title V # V-97-009. This permit consolidates the authority of any previously issued *federally enforceable* permit terms and conditions for various emissions units and incorporates all requirements of those existing permits into one single permit for this source. This permit is to be issued for public comment on January 31, 2002.

.